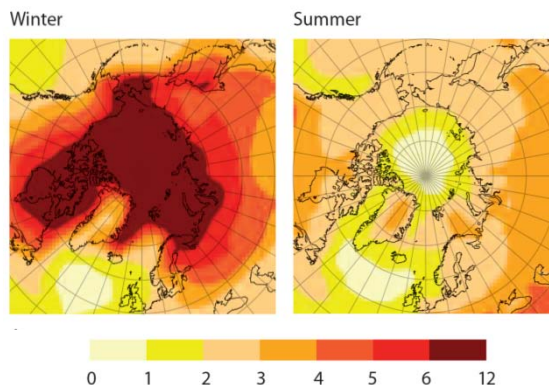


Arctic Change – Global Effects

Swedish Chairmanship

Lena Ek, Kiruna Ministerial Meeting, 15 May, 2013



Likely temperature increase – projections to 2100

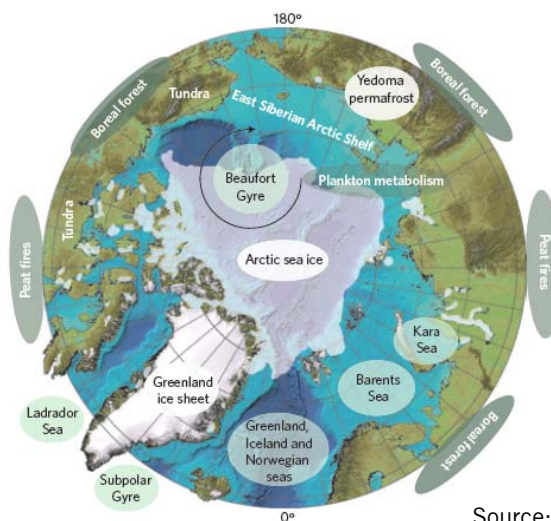
Source: AMAP's SWIPA assessment



Ministry of the Environment Sweden



Risks for abrupt changes – Arctic Resilience Report



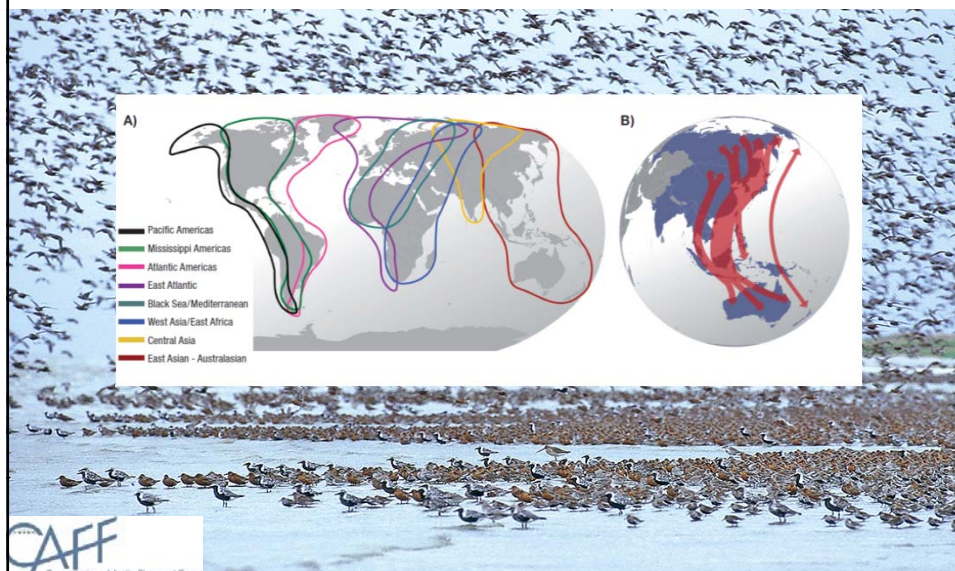
Source: Lenton et al 2012

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Arctic Biodiversity Assessment

Nine key planet flyways – all start in the Arctic



ARCTIC ENVIRONMENT MINISTERS MEETING

Chair's conclusions from Arctic Environment Ministers Meeting

- Changes in Arctic could dramatically affect humans and ecosystems
- Action to combat climate change and ocean acidification
- Prevent contamination in the Arctic
- Action to sustain biodiversity and ecosystem services
- Implement ecosystem based management

Chair's conclusions from Arctic Environment Ministers Meeting
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Changes in the Arctic could dramatically affect humans and ecosystems:
2°C globally would have major and irreversible impacts on the Arctic .
Large scale tipping points in the Arctic e.g. collapse of Arctic summer sea-ice may have substantial global effects.
Crucial to advance work on assessing Arctic change and improving resilience.
Strengthened preventive measures needed in emergency prevention work.

Climate change and ocean acidification:
Substantial cuts in global greenhouse gases backbone in mitigation efforts.
In addition urgent need for process to reduce short lived climate pollutants.
Follow-up actions on ocean acidification needed – carbon dioxide reductions best solution.

Preventing contamination in the Arctic: Clean up contamination hot spots, implement international instruments e.g. mercury convention, cooperate on mitigation projects and policies, new funding.

Action to sustain biodiversity and ecosystem services:
Recommendations of Arctic biodiversity assessment good basis for policy actions. Mainstreaming biodiversity in all relevant policy fields. Implement biodiversity targets, including protected areas, in particular the Aichi targets and work jointly. Discussed and recommended to speed up the work to protect sensitive areas and ecosystems based management, among other things to prevent oil and gas extraction in sensitive Arctic areas.

Ecosystem based management:
Implement Ecosystem Based Management in coastal, marine, terrestrial environments.
Identify biologically, ecologically and culturally sensitive and significant areas and ecosystems in Arctic States and Arctic Ocean, use traditional and scientific knowledge.

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